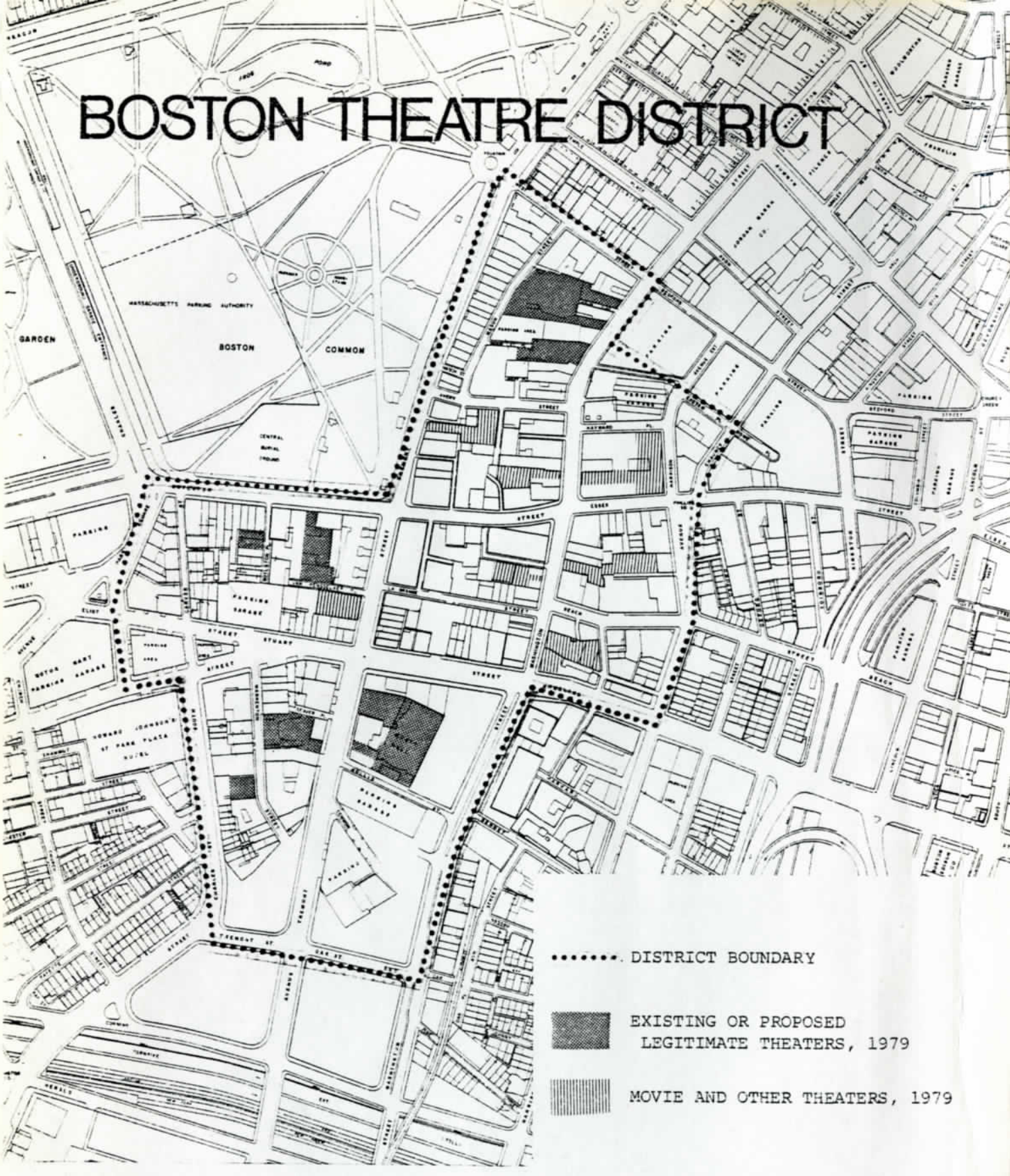
The Impact of Theater and the Performing Arts on Boston's Economy

CITY OF BOSTON · Kevin H. White, Mayor

BOSTON REDEVELOPMENT AUTHORITY
Robert J. Ryan, Director

HT
168
.B6
B6
1979

BOSTON THEATRE DISTRICT



DISTRICT BOUNDARY

EXISTING OR PROPOSED LEGITIMATE THEATERS, 1979

MOVIE AND OTHER THEATERS, 1979

Boston Redevelopment Authority Research Department 8/1979

THE IMPACT OF THEATER AND THE PERFORMING ARTS ON BOSTON'S ECONOMY

Sara Wermiel

Research Department
Boston Redevelopment Authority

August 1979

Kevin H. White, Mayor
City of Boston

Robert J. Ryan, Director
Boston Redevelopment Authority

Alexander Ganz, Director
Research Department

Boston Redevelopment Authority
Board of Directors

Robert L. Farrell, Chairman
Joseph J. Walsh, Vice-Chairman
James G. Colbert, Treasurer
James K. Flaherty, Ass't Treasurer
James E. Cofield, Jr., Member
Kane Simonian, Secretary

14411

Boston Redevelopment Authority
Robert J. Ryan, Director

August 17, 1979

PREFACE

Robert J. Ryan, Director
Boston Redevelopment Authority

Over the past several years, theatre and the performing arts in Boston have experienced a documented upsurge of activity. In addition, the City has made a long-term commitment to the physical stabilization and economic growth of the Theatre District, a key area of our central business/retail district that had been in decline.

Perhaps it should be understood that theatre and the performing arts constitute as much a part of the City's economic base as more traditional business groupings. This local entertainment "industry" generates employment and taxes, utilizes supporting commercial activities, imports dollars and significantly embellishes the quality of life that makes Boston unique.

It is in this regard that the Boston Redevelopment Authority prepared the report on The Impact of Theatre and the Performing Arts on Boston's Economy. The physical development of the Theatre District requires an understanding of the market forces that exist now in the area. This report provides that information and allows us an important basis on which to better project future trends.

Robert J. Ryan
Director

1 City Hall Square
Boston, Massachusetts 02201
(617) 722-4300

ACKNOWLEDGMENTS

Many thanks are due to the individuals who responded to the surveys which were the source of the data contained in this report. These include: the business managers of local theater and performing arts companies, the road managers of two touring shows, and the members of the audiences at surveyed performances.

I would also like to acknowledge the support of those members of the BRA and OCA staffs who were involved with the Theatre District planning work. Special thanks are due to Michael Matrullo and Charles Westfield of the BRA Research Department, who assisted with the audience survey.

"Our revels now are ended. These our actors,
As I foretold you, were all spirits, and
Are melted into air, into thin air.
And, like the baseless fabric of this vision,
The cloud-capped towers, the gorgeous palaces,
the solemn temples, the great globe itself -
Yea, all which it inherit - shall dissolve,
And, like the insubstantial pageant faded,
Leave not a rack behind. We are such stuff
As dreams are made on, and our little life
is rounded with a sleep."

From The Tempest
Act IV, sc. i.

CONTENTS

FOREWORD i

PREFACE ii

ACKNOWLEDGMENTS iii

INTRODUCTION AND SUMMARY OF FINDINGS 1

AUDIENCE EXPENDITURES 6

AUDIENCE SURVEY: RESEARCH METHODS AND AUDIENCE PROFILE 11

CONTRIBUTION OF COMMERCIAL THEATER TO BOSTON'S ECONOMY 16

THEATER-RELATED EMPLOYMENT IN BOSTON 20

ECONOMIC CONTRIBUTION OF BOSTON'S RESIDENT THEATER AND SELECTED PERFORMING ARTS GROUPS 23

A NOTE ON THE POTENTIAL MARKET FOR AN INCREASED NUMBER OF THEATER PERFORMANCES 26

APPENDICES

A. SOME STATISTICS ON BOSTON'S COMMERCIAL AND RESIDENT THEATERS AND SELECTED PERFORMING ARTS GROUPS, 1978 29

B. AUDIENCE EXPENDITURE SURVEY QUESTIONNAIRE 30

C. AUDIENCE SURVEY RESULTS 32

D. DESCRIPTION OF THE THEATRICAL PRODUCERS, BANDS, ORCHESTRAS, AND ENTERTAINERS INDUSTRY CLASS--SIC 792 35

E. ATTENDANCE OF FILMS IN THE THEATRE DISTRICT, 1978--SACK THEATRES CORPORATION'S MOTION PICTURE THEATER ATTENDANCE AND CORPORATE EMPLOYMENT IN BOSTON 36

F. THEATER ACTIVITY AT THE COLONIAL, SHUBERT, AND WILBUR THEATRES--1975-1978 37

MAPS

LOCATION OF BOSTON'S COMMERCIAL PLAYHOUSES, RESIDENT THEATERS, AND PERFORMING ARTS GROUPS v

BOSTON'S COMMERCIAL PLAYHOUSES 15

MAP 1

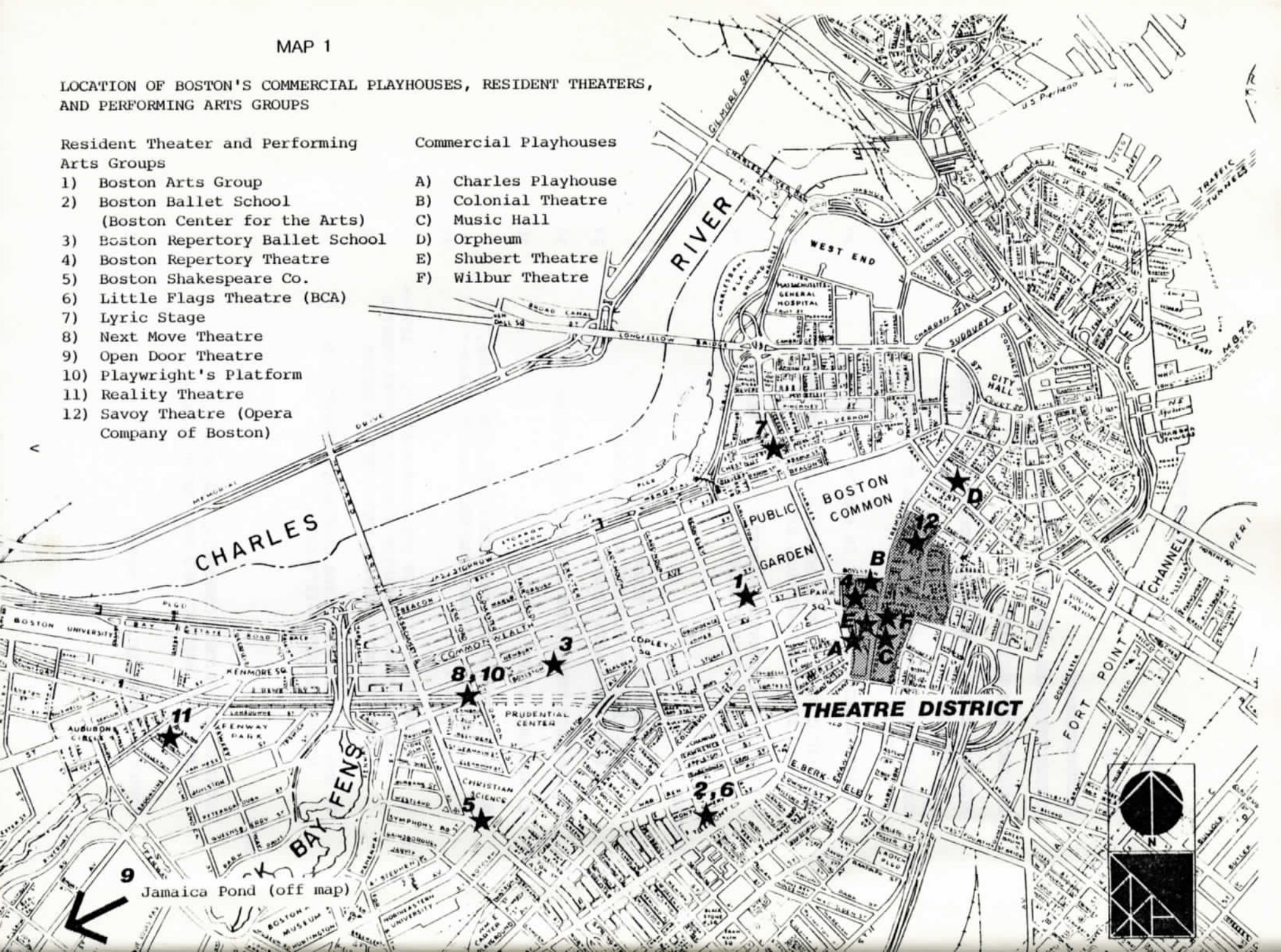
LOCATION OF BOSTON'S COMMERCIAL PLAYHOUSES, RESIDENT THEATERS, AND PERFORMING ARTS GROUPS

Resident Theater and Performing Arts Groups

1) Boston Arts Group
2) Boston Ballet School (Boston Center for the Arts)
3) Boston Repertory Ballet School
4) Boston Repertory Theatre
5) Boston Shakespeare Co.
6) Little Flags Theatre (BCA)
7) Lyric Stage
8) Next Move Theatre
9) Open Door Theatre
10) Playwright's Platform
11) Reality Theatre
12) Savoy Theatre (Opera Company of Boston)

Commercial Playhouses

A) Charles Playhouse
B) Colonial Theatre
C) Music Hall
D) Orpheum
E) Shubert Theatre
F) Wilbur Theatre



INTRODUCTION AND SUMMARY OF FINDINGS

As part of the Theatre District planning work, a study was undertaken to assess the contribution of live theater to Boston's economy. This report presents the findings of the study. It draws on methods and ideas contained in several recent papers which examine the effects of artistic and cultural activities on the economies of particular localities.[1/] However, except for one paper which was concerned only with the expenditures of legitimate theater audiences in Boston, there have been no previous studies of theater's economic impact on the City.[2/]

The Theatre District is an area of downtown Boston where the City's commercial playhouses are located--Boston's Broadway. While these legitimate playhouses are a characteristic and unique part of the area, they in fact comprise only a handful of the total number of structures and a fraction of the gross square footage in structures. Compared with other sections of the downtown, little new development has occurred here for

---

1/ Mathtech, Inc., The Impact of The Broadway Theatre on the Economy of New York City, Feb. 1977; David Cwi and Katherine Lyall, Economic Impact of Arts and Cultural Institutions, Nov. 1977; Gregory Wassall and John J. Sullivan, "The Impact of Artistic and Cultural Activities on Connecticut's Economy, 1975," The New England Journal of Business and Economics, Fall 1977.

2/ Arts Administration Research Institute, Harvard Business School, Harvard University, "The Economic Impact of Boston's Legitimate Theaters, A Preliminary Report," undated.

several decades and it has a very neglected appearance. The objective of the planning work is the revitalization of the District as a whole, yet the future of the theaters is the central planning issue. Emerging proposals for the area call for public and private investment which will complement and support the theaters.

Why should the City be concerned with theater? The first, hopefully well recognized reason is that theater is a very important part of Boston's vital cultural life. Yet theater contributes in another important but less appreciated way. Boston theaters, like any enterprise, purchase goods and services, create jobs, and pay taxes. In addition, by attracting people into Boston, theater also contributes to the earnings of businesses which serve the theater patrons--for example restaurants, garages, and shops. It is as a "people magnet" that theater has its greatest economic effect.

The primary focus of the study was the direct impact on the City's economy which results from the operation of Boston's Theatre District playhouses. However, resident professional theater companies and other performing arts groups were also included in the study because it is known that their audiences have similar characteristics to commercial theater audiences--and therefore the economic contirubtion of the audiences can be more easily assessed--and they are present and potential users of the Theatre District playhouses.

There are other kinds of entertainment and cultural activities taking place in the Theatre District and elsewhere in Boston which have economic effects. These would include strictly musical performances, films, and cabaret shows.1/ Since these activities are not within the focus of the study, which is live professional theater, their contribution was not measured.

1/ The mix of entertainment available in the Theatre District contributes to making the area lively. In fact, the peak season for motion picture attendance--the summer months--is generally a dark period for live theater downtown. See Appendix E for statistics on attendance of Sack Corporation's Theatre District motion picture theaters.

Three categories of economic effects were studied. The first and most significant is the dollar value of expenditures made by theatergoers in Boston. Information on audience expenditures was obtained from a survey which also yielded statistics on audience characteristics. The findings of the survey are discussed in the first two sections of the report. The second category is the spending in Boston and jobs which result from the operation of the City's commercial playhouses. The third category is the expenditures of the City's resident theater and selected nonprofit performing arts companies. Data was gathered for the 1978 calendar year, where possible.

Findings: Caveats and Summary

The reader should keep in mind, in interpreting the data which follows, that the estimate of theater's economic impact has been calculated for a particular year--calendar 1978. This was an unusually good year for commercial theater. (See Appendix F for a comparison of recent years.) Since the theater business is a volatile one, the dollar amounts of expenditures tend to vary from year to year, according to the number, production costs, and popularity of shows staged here.

Also, only theater's direct effects have been estimated. Businesses which derive income in part from theater related expenditures--such as the City's restaurants, shops, and musical instrument rental firms--in turn make purchases and hire employees and consequently also have an impact. However, there is insufficient data on these secondary effects to allow measurement of them.

One final word on the findings. The estimates of spending and Boston's share of it are based on numerous assumptions and guesses--especially in the case of commercial theater expenditures. We proceeded with the study, even

though actual or conclusive information was unavailable in many instances, in the interest of obtaining at least a "ball park" estimate of theater's economic impact on Boston. Considering how small the theater business is in Boston and the sensitivity of cost information, it is possible that more accurate information could not be obtained even if more time and resources were available for continuing the study. Naturally, we welcome any comments and suggestions on this report.

The general conclusion of this study is that theater has a modest but not unimportant effect on Boston's economy. (See Table 1.) Theater business was responsible for an estimated $4.8 million in expenditures with Boston enterprises in 1978. In addition, there are over 1,300 individuals who work in the theater field in Boston--including agents, musicians, entertainers, and stagehands. Most importantly, theater attracted over 1,300,000 patrons in 1978 who spent an estimated $12.75 million in Boston. City and State treasuries also benefit directly from theater activity. Boston's commercial playhouses contribute approximately $232,000 in property tax payments to the City. State taxes collected from theater activity have not been comprehensively measured, but the meals tax alone could yield nearly $400,000, given the estimated expenditures of theatergoers for meals.

Perhaps the main policy-related observation emerging from these findings is that theater functions like Faneuil Hall Marketplace in drawing people to the City. To the extent that the City wishes to support downtown business activity--especially eating establishments, shops, hotels, and so forth--it should support theater. Whatever programs are developed to help increase the number of evenings of legitimate productions, the quality of entertainment available, and the appearance and convenience of the Theatre

District--in so far as they promote theater attendance--will have a direct positive effect on downtown businesses.

The public improvements which are being planned for the Theatre District will complement the improvements already underway on Washington Street and significantly extend the area of Central Boston which has been redeveloped in the past two decades. Such a program of improvements should encourage private investment in building renovation and new construction, and an expansion of business activity, thereby strengthening Boston's economic and tax base.

Table 1

DIRECT IMPACT OF THEATER-RELATED SPENDING ON BOSTON'S ECONOMY, 1978

		Estimated Total Spending	Estimated Portion of the Total Spent in Boston
I.	Theater Audiences		
	Commercial Theater	$10,146,000	$10,146,000
	Resident Theater and Performing Arts Companies	2,605,000	2,605,000
II.	Commercial Theater		
	Operations of Playhouses	2,494,000	1,118,000
	Producers' Expenditures (Boston portion)	4,403,000	1,956,000
III.	Resident Theater and Performing Arts Companies	4,096,000	1,747,000
	Total	$23,744,000	$17,572,000

Note: These figures update those contained in the BRA preliminary report, Boston's Theatre District: A Program for Revitalization, March 1979.

AUDIENCE EXPENDITURES

Audience expenditures have a greater impact on Boston's economy than any of the other kinds of theater-related economic effects. While ticket price looms large in the mind of the theatergoer when he thinks of the cost associated with attending a show, in fact the average theater patron spends nearly as much on ancillary items -- eating out, transportation to and from the playhouse, going for a drink after the performance--as on the ticket itself.

A survey of audience members conducted in spring of 1979 revealed that the average theatergoer spends $10.69, exclusive of ticket price, when he or she attends a performance in Boston.[1/] (See Table 2 for an itemized breakdown of this figure.) In addition, many theater patrons make purchases in Boston shops while they are in town for a show--often rather expensive purchases. The median expenditure of those survey respondents who shopped was $25.00.

Out-of-region theatergoers make a disproportionate contribution to Boston's economy compared with local patrons. The greater the distance that theater patrons travel in order to attend a show, the more they tend to spend when in Boston. Audience members living within thirty miles of the Theatre District spent less than $9.00 each; those living between 30 and 100 miles spent about $15.50; and those living over 100 miles away spent about $17.50 each. (See Table 3.)

Furthermore, Boston residents spend less on the average when they go to a show than do residents of other communities. (See Table 3.) Consequently, most of the business earnings which result from

---

1/ See the "Audience Survey" section of this report for a description of methodology. Appendix C contains tabulations of respondents answers to the survey questions.

TABLE 2

AVERAGE EXPENDITURES OF THEATERGOERS IN BOSTON

Item	Mean Per Person Expenditure	Number of Respondents Who Spent Money On Item	Percentage of All Respondents Who Used Item	Median Per Person Expenditure of Respondents Who Used Item
Parking	$ .98	579	64%	$ 1.25
Taxi	$ .17	56	6%	$ 2.00
Restaurant	$ 6.67	524	58%	$10.00
Hotel	$ .89	25	3%	$25.00
Night Club/ Bar	$ 1.98	243	27%	$ 5.00
Total	$10.69			
Shopping	$ 6.53	62	7%	$25.00
Other	.16	14	2%	$ 7.00
Total	$ 6.69*			

* Not included in the per person expenditure total because these purchases may have been made regardless of whether an individual was attending the theater.

Source: B.R.A. audience survey.

TABLE 3

AVERAGE EXPENDITURE OF BOSTON THEATERGOERS
BY DISTANCE OF RESIDENCE FROM THEATER
AND PLACE OF RESIDENCE

	Number of Miles Away			Place of Residence	
				Boston Residents	Not Boston Residents
	0-30	31-100	101+		
Parking	.95	1.18	.63	.73	1.03
Taxi	.12	.27	.41	.30	.14
Restaurant	5.87	8.53	10.47	6.36	6.74
Hotel	.08	2.92	4.27	.16	1.04
Night Club/Bar	1.86	2.53	1.72	2.16	1.94
Total	$8.88	$15.43	$17.50	$ 9.71	$ 10.89
Shopping	.95	8.51	13.93	1.44	3.58
Other	.09	.34	.54	0	.20
Total	$1.04	$ 8.85	$14.47	$ 1.44	$ 3.78
Public Transportation	.21	.40	.75	.18	.30
Babysitter	.49	1.10	0	.33	.63
Total	$ .70	$ 1.50	$ .75	$ .51	$ .93

Note: "Public transportation" includes: MBTA; Amtrak; chartered or inter-city public buses.

Source: B.R.A. audience survey.

theatergoer expenditures are in "imported" dollars.

It is estimated that roughly 950,000 tickets to legitimate, commercial theater productions were sold in 1978. Multiplying annual attendance by average expenditure, it is estimated that these patrons spent $10.15 million in the City last year. (See Table 4.)

Table 4

ESTIMATED EXPENDITURES OF
COMMERCIAL THEATER AUDIENCES
1978

Number of paying attendants of legitimate theater productions	949,618*
Per capita expenditure for restaurants, parking, hotels, taxis, night clubs, and bars in Boston	$10.69
Total related expenditures, exclusive of ticket	$10,146,190.00**

* Based on attendance of legitimate theater performances at five theaters. Attendance was calculated by dividing total box office receipts for each show by the average ticket price per show. The average ticket price per show was the result of the potential weekly gross divided by the number of seats available.

** Calculated with unrounded values.

Sources: Box office receipts: theater managers and Variety, 2/78-1/79.
Per capita expenditures: See Table 2.

Similarly, resident theater audiences make ancillary purchases when attending performances in Boston. It is estimated that 372,000 tickets were sold to performances of resident theater, ballet, and staged opera productions. At a per person expenditure of perhaps $7.00, the economic contribution of these audiences was $2.6 million. (See Table 5.) Taken together, theater audiences spent an estimated $12.75 million in Boston last year.[1/]

1/ 1979 prices, not adjusted for 1978.

TABLE 5

ESTIMATED RELATED EXPENDITURES OF RESIDENT THEATER, SELECTED DANCE AND OPERA PERFORMANCE AUDIENCES, 1978

Number of paying attendants	372,081
Estimated per capita expenditure	$7.00*
Total related expenditures, exclusive of ticket	$2,604,567.

* Per capita expenditures are assumed to be roughly one-fourth less than the average expenditures of the 904 theatergoer questionnaire respondents. This amount is something of an average between the expenditures of Opera Company of Boston audiences, which might be expected to spend the same amount as commercial theater audiences, and resident theater audiences, which might be expected to spend considerably less. The $7.00 per capita figure approximates the average expenditure of attendants of the two resident performing arts groups audiences surveyed--Boston Repertory Ballet and Reality Theatre.

Source: Based on BRA audience survey and theater, dance, and opera company business manager survey.

AUDIENCE SURVEY: RESEARCH METHODS AND AUDIENCE PROFILE

In order to estimate the total amount of "going-out" related expenditures described in the preceding section, a self-administered survey of theater audiences was made to obtain information on their actual expenditures. The survey approach, despite certain limitations, is the most efficient means of obtaining expenditure information, and the survey instrument and field procedures used were designed in order to best overcome some of the problems associated with it.

Research Methods

The questionnaire used in the survey was modeled on a form developed specifically for this type of study.[1/] In addition to socioeconomic data, it requests information on patrons' expenditures for eight items. The object of the questionnaire was to obtain average expenditures for each person. Since certain expenditures may cover the expenses of more than one person, the respondents were asked to divide total expenditures for an item by the number of people in their group who used them. Judging from the completed questionnaires, the great majority of respondents averaged their expenditures as requested. Furthermore, in order to avoid duplication of information, questionnaires were distributed to every other person (either stuffed in alternate programs or handed to every other attendant as the audience entered the theater).

One problem with a survey approach is the representativeness of the sample. Audiences vary with the type and day of week of performances and

---

1/ Mathtech, Inc., The Impact of the Broadway Theatre on the Economy of New York City, February 1977, provided the model.

consequently the performances surveyed were selected with an eye to sampling this variety. Six audiences were surveyed in the second half of March and first half of April, 1979. (See Table 6.)

Nine hundred and four valid, completed questionnaires were returned, yielding an overall response rate of 37 percent. Since each respondent typically reported the expenditures of at least two people, the activities of far more than 904 people are represented.

In order to achieve a satisfactory response rate, three or four BRA representatives circulated through all the seating sections of the the theaters before the shows and during intermissions, distributing pencils to those respondents who needed them and collecting completed forms. This procedure greatly increased the visibility of the survey and the number of responses.

Audience Profile

Boston's theater audience is largely a metropolitan one. Nearly three-fourths of all theater patrons live within a thirty mile drive of downtown Boston. Nevertheless, six percent of the audience live over 100 miles away. To put these figures in some perspective, compared with the audiences for three performing arts groups in Baltimore, this non-metropolitan proportion is high. Even if all theatergoers who live within fifty miles of downtown Boston are considered metropolitan area residents, fourteen percent of the audience would be considered out-of-region as contrasted with five to six percent of the three Baltimore

TABLE 6

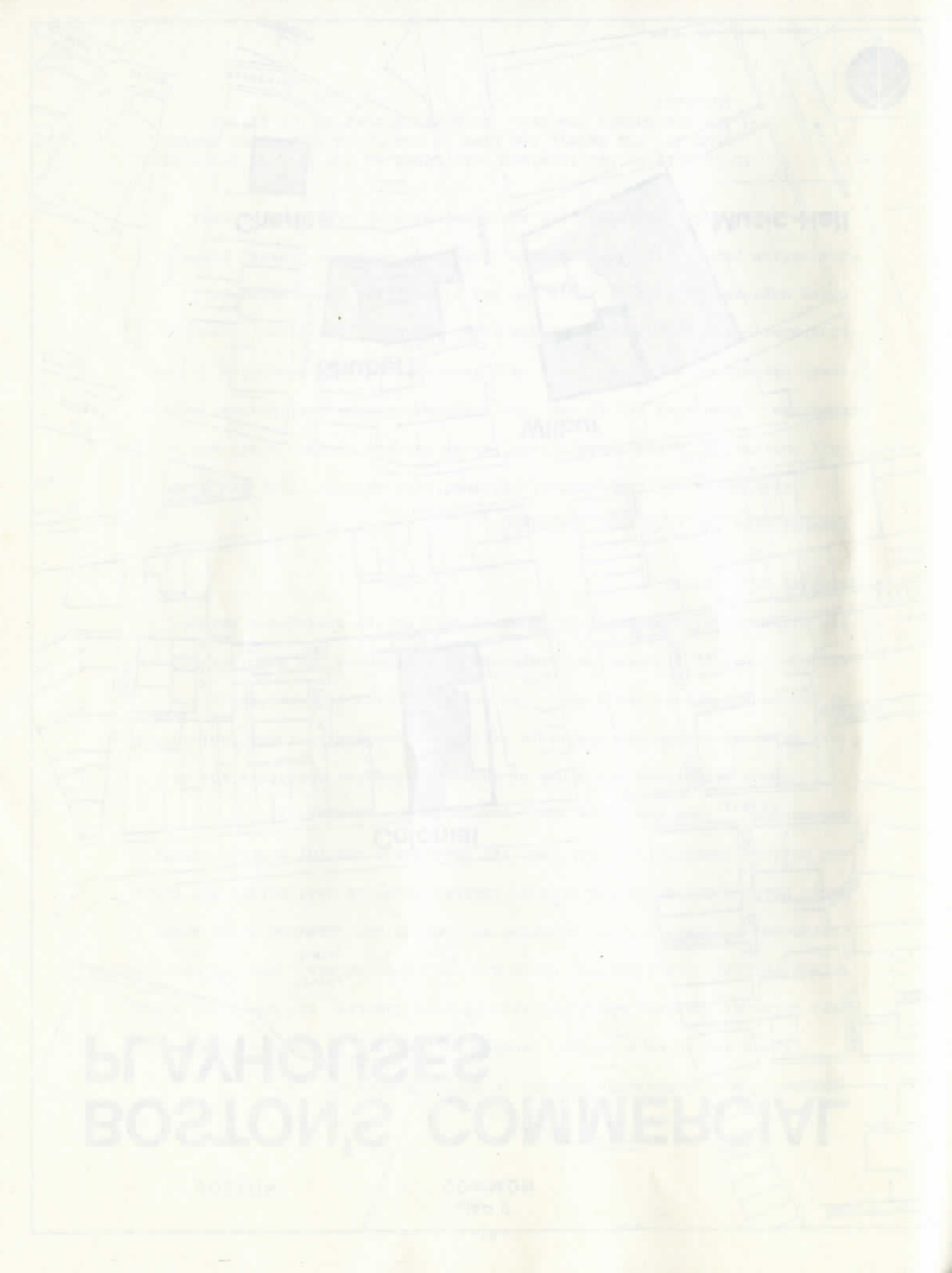
AUDIENCES SURVEYED

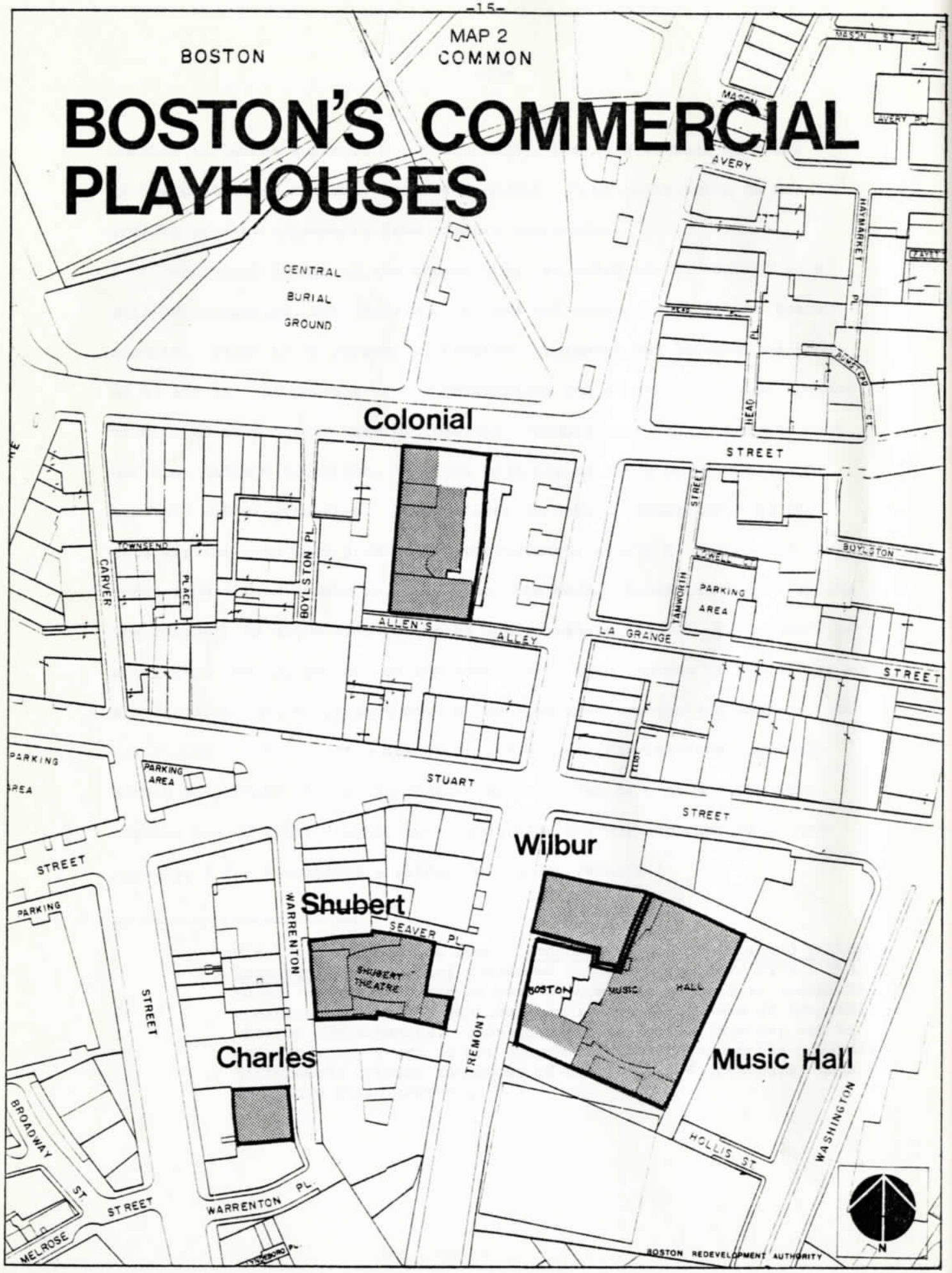
Show Name	Type of Show	Theater	Date of Performance	Questionnaires Distributed	Valid Responses	Response Rate
Boston Rep. Ballet	Dance	John Hancock Hall	Friday Evening March 17, 1979	425	131	30.8
"Ain't Misbehavin'"	Musical	Wilbur	Saturday Matinee March 24, 1979	600	217	36.1
"Master of Ecstasy"	Play	Mass. College of Art	Saturday Evening March 24, 1979	30	24	80.0
"The Shadow Box"	Play	Charles	Friday Evening March 30, 1979	204	118	57.8
"A Chorus Line"	Musical	Shubert	Saturday Evening March 31, 1979	750	250	33.3
"Dracula"	Play	Colonial	Tuesday Evening April 10, 1979	425	161	37.9
Unknown					3	
Total				2,434	904	37.1

theater audiences surveyed[1/]. Undoubtedly, Boston's virtual monopoly in New England on Broadway-bound and touring shows contributes to its ability to draw attendants from greater distances.

The usual notion of the theatergoer as being young, working in a skilled occupation, and well-educated was not contradicted by the survey results. Close to 40 percent of theater audiences are between the ages of 25 and 34; 46 percent of the respondents and 40 percent of the spouses of married respondents have professional occupations; and 80 percent have had some college education, with the majority of these being college or graduate school graduates. (Occupations in health, education, and the arts are the ones most prominently represented; nearly 12 percent of the theatergoers are students). Likewise, the median household income of the theatergoer is above average, being approximately $21,000. It should be noted that over 80 percent of the respondents with incomes of $20,000 or more are families, and 60 percent of the families have two working members, so the higher incomes are the result of two wages. For instance, approximately 90 percent of the respondents with incomes of over $35,000 were married and of these roughly two-thirds have two working members. (See Appendix C for a complete breakdown of survey results.)

1/ David Cwi and Katherine Lyall, Economic Impact of Arts and Cultural Institutions, National Endowment for the Arts, Nov. 1977. The Boston audiences surveyed were predominantly those at commercial theaters, unlike the Baltimore audiences which were at nonprofit theater performances. Consequently, the comparison may not be appropriate. There is not enough information about the possible differences between audiences of nonprofit and commercial theater to assume this, however.




BOSTON
MAP 2
COMMON
BOSTON'S COMMERCIAL PLAYHOUSES
CENTRAL
BURIAL
GROUND
Colonial
AVERY
HAYMARKET PL.
HANOVER
HEAD PL.
TEMPLE
COURT
STREET
TOWNSEND
PLACE
CARVER
BOYLSTON PL.
ALLEN'S ALLEY
TREMONT STREET
BOYLSTON
PARKING AREA
LA GRANGE
STREET
STUART
STREET
PARKING AREA
PARKING
STREET
Wilbur
Shubert
SEAVER PL.
SHUBERT THEATRE
WARRENTON
STREET
Charles
TREMONT
BOSTON MUSIC HALL
Music Hall
BROADWAY
ST
STREET
WARRENTON PL.
MELROSE
HOLLIS ST.
WASHINGTON
N
BOSTON REDEVELOPMENT AUTHORITY

CONTRIBUTION OF COMMERCIAL THEATER TO BOSTON'S ECONOMY

There are three principal legitimate theaters in Boston: the 1,700 seat Colonial Theatre, the 1,700 seat Shubert Theatre, and the 1,200 seat Wilbur Theatre. In addition, there are two other houses: the 500 seat Charles Playhouse, a former church converted to theater use; and the 4,200 seat Music Hall, a former motion picture theater which is used mainly for dance and musical concerts but last year was used for a touring musical comedy production.[1/] (See Map 2 for the location of the theaters.)

These properties are owned or leased by theater operators who in turn make the playhouses available to theater producers--those individuals or groups who create the shows. The great majority of shows which are staged in Boston's commercial playhouses are produced in New York and are either touring versions of Broadway hits or are trying-out before opening on Broadway.

Expenditures for Playhouse Operation

Playhouses are very special kinds of real estate. They are used only intermittently and during "dark" weeks require minimal staff and services. When they are in use, the playhouse owners (or lessees) have a great variety of expenses, which vary from show to show according to contractural cost-sharing arrangements made with show producers. Normally these expenses include at least the salaries of the house managers, box office personnel, ticket takers, backstage doormen, ushers, porters, office help, and stagehands. In addition, as with any piece of real

---

1/ In late 1978, two theaters were added to the list of legitimate houses: The Savoy, new home of the Opera Company of Boston, and the Modern Theatre. Both are former motion picture theaters.

estate, the owners must pay for real estate taxes and repair on a continual basis; and such items as utilities and cleaning according to use.

It is estimated that in 1978, playhouse owners and lessees spent approximately $2.49 million for operating their playhouses.[1/]

To ascertain the effect of this spending on Boston, it is necessary to know what proportion of these expenditures were made in the City. In the data received, payroll was not separated from other costs. Furthermore, we do not know where playhouse owners purchased goods and services, or playhouse employees spent their incomes. Consequently, these spending patterns were inferred.

It is assumed that one-third of all expenditures were for non-payroll items.[2/] After deducting property tax payments from this amount and assuming 90 percent of the remainder is spent in Boston, the resulting amount is $577,000. Two-thirds of total expenditures is for payroll and most of the playhouse employees belong to unions whose jurisdictional boundaries do not extend very far beyond Boston. Consequently, it was assumed that

---

1/ This figure was derived largely from confidential information obtained by the BRA on operating costs, as reported by playhouse owners and lessees for 1978. Actual costs were reported usually for the first three quarters of 1978 or, in the case of one theater, for the first half of 1978. Based on available information, an estimated cost per playing week for each theater was calculated by dividing total costs by the number of playing weeks. Annual costs were calculated by multiplying the annual number of playing weeks by the average weekly operating cost. The operating expenditures of the Music Hall during the weeks of "Man of La Mancha" were assumed to be roughly the same as the average costs per playing week of the Colonial.

2/ Conversation with Marge Roedig, manager of the Shubert Theatre.

half of the after tax portion of income was spent in Boston.[1/] This amount is roughly $541,000. The sum of the effects of playhouse operations on Boston businesses, therefore, is $1,118,000.

Theater Producer's Expenditures in Boston

Theater producers who lease Boston's playhouses make weekly outlays for such items as salaries and living stipends of traveling company members, wardrobe, carpentry, electrics, wages of local personnel, stage manager's costs, and publicity and advertising. (These are of course not all the expenses of a show, but only the primarily local ones.) There were 28 legitimate productions in Boston's Theatre District last year, not counting the performances of nonprofit performing arts companies. Because it would be virtually impossible to learn the actual outlays of each production, this amount was estimated for all theaters, except the Charles, by multiplying an "average" weekly operating cost, based on the reported expenditures of a sample of show managers, by the number of playing weeks. Unfortunately this cost information could be obtained for only two shows, as producers are understandably hesitant to give out this kind of information. Using the available data in the manner described, and adding to it an estimate for the expenses of producers using the Charles, it is calculated that producers spent a total of $4.41 million for running their shows in Boston in calendar 1978.

1/ A recent survey of Longwood Medical Area Institution workers found that 52.4 percent of all employee income was spent in Boston, though less than one third of the workers were Boston residents. (The First National Bank of Boston, The Wage/Payroll Impact in the Boston Area of the Longwood Medical Area Institutions, Feb. 1979.)

The portion of these expenditures actually made with Boston firms is assumed to be 90 percent of the estimated value of weekly living stipends of the traveling cast and crew members and 75 percent of the value of goods and services purchased, less the costs of moving a show in and out of the theater.[1/] This calculation yields an estimate of $1.96 million for expenditures in Boston.

1/ From conversations with road managers of surveyed shows.

THEATER-RELATED EMPLOYMENT IN BOSTON

The theater business is seasonal and also changes from year to year, consequently the number of jobs in Boston associated with it tends to fluctuate. Information on theater-related employment is scarce. For the purposes of making an estimate for this study, three sources of data were used. The first was the number of jobs covered by the Mass. Employment Security Law in the industry group (SIC 792) which includes theatrical producers, bands, orchestras, and entertainers, in Boston. The second source is the Census of Selected Service Industries, for an estimate of self-employed (and therefore not subject to the Employment Security Law) individuals in the same industry group in Boston. The final source is membership of unions which cover theater backstage occupations, and are not part of industry group 792. (See Appendix D for a description of SIC 792.) The first two sources include jobs which are not directly theater jobs--for instance, musicians who perform only in concert halls. However, it is impossible, with the information available to us, to estimate what portion this might be.

In 1978, there was an average of approximately 970 jobs in SIC 792 in over 50 establishments in Boston. (See Table 7.) About half of these jobs

Table 7

ANNUAL AVERAGE EMPLOYMENT WITH THEATRICAL PRODUCERS, BANDS, ORCHESTRAS, AND ENTERTAINERS (SIC 792) IN BOSTON, 1970 - 1978

Year	Number of Establishments	Number of Jobs
1970	34	442
1971	30	452
1972	38	682
1973	70	620
1974	40	561
1975	50	710
1976	48	597
1977	58	785
1978	55	974*

* First three quarters 1978 average.

Source: Mass. Division of Employment Security, Employment in Establishments Subject to the Mass. Employment Security Law.

TABLE 8

NUMBER, RECEIPTS, PAYROLL, AND EMPLOYMENT WITH SELECTED AMUSEMENT AND RECREATION SERVICES IN MASSACHUSETTS AND BOSTON
1972

	SIC 792 Producers, Orchestras Entertainers		SIC 7922 P.T. Producers of Legitimate Theatre		SIC 7922 P.T. Theatrical Services[1]	
	Mass.	Boston	Mass.	Boston	Mass.	Boston
All Establishments						
Number	1,615	182				
(As a percent of Mass.)		(11%)				
Receipts ($1,000s)	$27,252	$ 9,320				
(As a percent of Mass.)		(34%)				
Establishments with Payrolls						
Number	122	33	30	6	34	19
(As a percent of Mass.)		(27%)		(20%)		(56%)
Receipts ($1,000s)	$17,032	(D)	$4,835	$477	$5,533	$2,600
(As a percent of Mass.)				(10%)		(47%)
Payroll, entire year ($1,000)	$ 9,265	(D)	$1,540	$203	$2,012	$864
(As a percent of Mass.)				(13%)		(43%)
Paid Employees for Week of March 12	928	(D)	131	46	259	124
(As a percent of Mass.)				(35%)		(48%)

(D) Withheld to avoid disclosure.

1. Includes artists and entertainers; managers or agents; concert bureaus; booking agents.

Source: U.S. Bureau of the Census, Census of Selected Service Industries, 1972, Area Series, Massachusetts, U.S. Government Priority Office, Washington, D.C. 1974.

were with theatrical producers and miscellaneous theatrical services, and the other half were with bands, orchestras, actors and other entertainers, and entertainment groups.[1/]

Not all individuals who work in theater are employed by establishments which participate in the Unemployment Insurance program, and consequently their jobs are not reported in the preceding firgures. For an estimate of proprietors in industry group 792, in 1972--the most recent year for which this information is available--there were 182 establishments in Boston and the vast majority of these (149) had no salaried employees. (See Table 8.) Consequently, perhaps 150 additional individuals work in this industry, assuming 1972 data is still applicable to 1978.

The employees connected with the playhouses are counted in a different industry class, which covers special kinds of real estate operations. Therefore, statistics were obtained on the membership of labor unions which cover most playhouse personnel at the Colonial, Shubert, Wilbur, and part of the Music Hall. There are three Boston locals of the International Alliance of Theatrical Stage Employees Union. The stagehands local--covering stagehands and technicians--has about 90 members working fairly regularly. There are perhaps 25 members of the wardrobe workers local. The local which covers playhouse staff--ushers, doormen, etc--has 105 members, 55 of whom work fairly regularly.[2/] In addition to these workers, it is estimated that perhaps 30 people are employed in the management of playhouses or work in backstage occupations but are not union members. A total of roughly 200 people, therefore, work fairly regularly in Boston's legitimate playhouses.

A grand total estimate of theater employment in Boston would be the the sum of 970 jobs reported by the Mass. D.E.S., 150 self-employed individuals, and 200 backstage workers, yielding 1,320 jobs generated by theater acitivty.[3/]

1/ Mass. Division of Employment Security: Theater Producers and services--476. Musicians, actors, and entertainers--498. Averages of nine months employment.

2/ Based on conversations with the stagehands' and ushers' locals leaders.

3/ Resident theater and performing arts group personnel are counted only if the company participates in the Unemployment Insurance program.

ECONOMIC CONTRIBUTION OF BOSTON'S RESIDENT THEATER AND SELECTED PERFORMING ARTS GROUPS

Boston's resident theater, dance, and opera groups make a notable contribution to the City's economy. To estimate this contribution, thirteen performing arts organizations were studied. Statistics on the groups were obtained from several sources: a survey of theater groups, budget reports, and conversations with their representatives.[1/] Data was gathered for the 1978 calendar year or, if unavailable for this year, for a recent fiscal year.

The results of this study reveal that Boston's resident theater and performing arts companies staged approximately 1,150 performances in Boston before audiences numbering over 370,000 people last year. The expenditures of the groups amounted to $4,096,000.

Unlike commercial theater, only one of the resident theater performance spaces is located in the Theater District, though some groups rent the commercial playhouses for performances. All but one of the groups were nonprofit companies. While all nonprofit performing arts groups depend in part on grants and donations for their support, the majority of those studied--and especially the theater groups--earned the greater portion of their revenues. Their most important sources of income were ticket sales, touring, and instruction. Of the nine groups for which information on sources of revenue was available, approximately two-thirds of their combined income was earned. For the six theater groups among these, the proportion of earned income was even higher, representing slightly over 70 percent of their revenue from all sources. (See Table 9.)

1/ Groups represented include: Theater: Boston Arts Group, Boston Repertory Theatre, Boston Shakespeare Company, Little Flags Theatre, Lyric Stage, Next Move Theatre, Open Door Theatre, Playwright's Platform, and Reality Theatre; Opera: Opera Co. of Boston; Dance: Boston Ballet, Boston Repertory Ballet, and the dance performances sponsored by the B.U. Celebrity series.

TABLE 9

INCOME AND EXPENDITURES OF NINE
BOSTON PERFORMING ARTS GROUPS
By Source

	Total Expenditures		Total Income	
Earned Income	Amount	Earned Income As a Percentage of Total Expend.	Amount	Earned Income As a Percentage of Total Income
$2,380,000	$3,905,800	61%	$3,658,400	65%

INCOME AND EXPENDITURES OF SIX
BOSTON THEATER GROUPS
By Source

	Total Expenditures		Total Income	
Earned Income	Amount	Earned Income As a Percentage of Total Expend.	Amount	Earned Income As a Percentage of Total Income
$623,700	$872,000	72%	$872,700	71%

Source: Survey of groups and published budget data. Statistics on five of the theatre groups are for the 1978 calendar year and the sixth is for the 1978 fiscal year. The budgets of three different fiscal years are represented for the other groups - the 1977, 1978, and 1979 seasons; this was the only information readily available.

Theater is a labor intensive activity, which means that a relatively large part of a performing arts company's expenses is for salaries, employee benefits, income taxes, and contract labor. For seven groups for which expenditure information was available, nearly two-thirds of the sum of their expenditures were for personnel costs. The artists, teachers, and administrative personnel connected with these companies are by and large residents of the Boston metropolitan area and tend to spend a greater proportion of their incomes here than do the employees of commercial theater producers.

Survey information indicated that sixty-four percent of expenditures of seven groups were for payroll items. Assuming this ratio of payroll to nonpayroll expenditures holds for all groups, the groups spent approximately $2.62 million for personnel costs and $1.47 million for goods and services. Deducting twenty-three percent from the personnel costs, as income taxes and benefits, and assuming half of the balance is spent in Boston, the performing arts company employees contribute slightly over $1 million to earnings of Boston enterprises. Assuming that half of their production expenditures are made locally, or about $737,000, the economic impact of resident theater and performing arts groups is $1.75 million.

Table 10
Personnel Expenditures of Seven Boston Performing Arts Groups as a Proportion of Total Expenditures

Total Expenditures	Personnel Expenditures	Personnel As a Percentage of Total Expenditures
$1,911,800	$1,232,600	64%

Source: Survey of groups and published budget data. Statistics represent 1978 calendar year expenditures for five groups, the 1977 fiscal year for one, and the 1979 fiscal year for the seventh group.

A NOTE ON THE POTENTIAL MARKET FOR AN INCREASED NUMBER OF THEATER PERFORMANCES

One indicator of the potential market for an increased number of performances in Boston is theater attendance trends. However, because the amount and quality of productions vary each year, season to season comparisons are not a valid indicator of interest in theater per se. A season with few productions which receive poor notices will naturally have a smaller annual attendance than a fuller season of popular shows. With this in mind, we might nevertheless point out that the number of patrons or frequency of theater-going can significantly increase during certain seasons.

Comparing ticket sales in the 1975/76 theater season with the 1978 calendar year, there were nearly fifty percent more tickets available for legitimate shows during the latter period, representing more productions and playing weeks than in the earlier period.[1/] Nearly forty percent more tickets were sold in 1978. (See Table 11.) This would appear to mean that there is not a fixed limit to audience size or frequency of theater-going. Given certain kinds of productions, the audience will increase.

1/ Both periods include twelve months, though the 1978 calendar year consists of halves of two theater seasons. In 1975/76 there were sixteen shows at the Colonial, Shubert, and Wilbur Theatres which played for 77 weeks. In 1978 there were 21 shows at these same three theaters, playing for about 74 weeks (not counting "Beatlemania"); in addition, there was one legitimate show at the Music Hall and six at the Charles, which together played for fifty weeks.

TABLE II

TICKETS SOLD IN THEATRE DISTRICT COMMERCIAL PLAYHOUSES IN 1978 COMPARED WITH THE 1975-1976 SEASON

	Tickets Available	Number Sold	Number Unsold
		1975-76 Season	
Charles, Colonial, Shubert, Wilbur	996,528	683,279*	313,249
Percent	100%	69%	31%
		1978 Calendar Year	
Charles, Colonial, Shubert, Wilbur	1,076,019	657,456	418,563
Percent	100%	61%	39%
Music Hall	401,375	292,162	109,213
Percent	100%	73%	27%
Total	1,477,394	949,618**	527,776
Percent	100%	64%	36%

* Actual for Colonial, Shubert, and Wilbur. Estimated for the Charles. Includes complimentary tickets.

** Estimated. Based on box office receipts reported in Variety. Does not include complimentary tickets.

Sources: Theatre Development Fund, Inc., The Feasibility of A Half-Price or Other Central Ticket Marketing Outlet For The Performing Arts in Boston, New York, Sept., 1977, p. 6. Variety, Jan. 1978 through Jan. 1979.

APPENDICIES

APPENDIX A

SOME STATISTICS ON COMMERCIAL AND RESIDENT THEATERS AND SELECTED PERFORMING ARTS GROUPS IN BOSTON 1978

Commercial Theaters

Charles (Main Stage), Colonial, Music Hall, Shubert, Wilbur

Number of different productions	28
Number of performances	984
Number of playing weeks	123
Box office receipts	$12.95m
Tickets sold	949,600

Resident Theater and Performing Arts Groups

Boston Arts Group, Boston Repertory Theatre, Boston Shakespeare Company, Little Flags Theatre, Lyric Stage, Next Move Theatre, Open Door Theatre, Playwright's Platform, Reality Theatre, Opera Company of Boston, Boston Ballet, and Boston Repertory Ballet.

Number of performances	1,150
Number of tickets sold	372,000

Sources: Commercial theater: theater owners and lessees and Variety, Jan. 1978 - Jan. 1979. Resident companies: survey of business managers of groups.

APPENDIX B

Boston Redevelopment Authority

QUESTIONNAIRE: Impact of Theatre on Boston's Economy

This questionnaire is part of a study on the impact of live theatre and other performing arts on Boston's economy. Your responses will be very important to the study and we appreciate your taking the time to complete the form. Your answers will be confidential and anonymous.

---

1. How many people are in your party, including yourself? _____

2. How far do you live from the theater (number of miles one way)? _____

3. Are you a resident of Boston? _____ Yes _____ No

4. If not a resident of Boston, in which city or town do you live? _____ (City/town), _____ (State)

5. Would you have made your trip downtown if you were not attending this performance? _____ Yes _____ No

We would like to calculate a per person expenditure for each of the following items. (Please divide the total cost for your group by the number of people in your group, as indicated.) If you did not use them, please leave blank.

6. Parking (divide total cost by number of people in car). $_____

7. Public transportation. _____

8. Taxis originating in Boston (divide total cost by number of people in cab). _____

9. Restaurant in Boston (divide total bill by number of people in your party attending). _____

10. Babysitter (divide total cost by number of people in family attending). _____

- Over -

Research Dept.
1 City Hall Square
Boston, Massachusetts 02201
(617) 722-4300

Boston Redevelopment Authority is an Equal Opportunity / Affirmative Action Employer

11. Hotel per night (if your attendance at the theatre is the reason your are spending the night in Boston; divide total by number in room). _____

    Number of nights spent in Boston hotel _____

12. Night club or bar in Boston per person (please estimate on basis of past experience if you will visit after performance). _____

13. Shopping. _____

14. Other, please specify _____

We would also like some information about yourself.

15. Male ____ Female ____

16. Married ____ Not married ____

17. Have children ____ No children ____

18. Your age:

Under 20 ___	35-44 ___	65 or over ___
20-24 ___	45-54 ___	
25-34 ___	55-64 ___	

19. What is your occupation? _____

20. If married, what is your spouse's occupation? _____

21. What was your total family income (or your income, if single) in 1978, before taxes?

Under $5,000	___	$20,000 - 24,999	___
$ 5,000 - 9,999	___	$25,000 - 29,999	___
$10,000 - 14,999	___	$30,000 - 34,999	___
$15,000 - 19,999	___	$35,000 or more	___

22. How much formal education have you completed?

Elementary school	___	1-3 years of college	___
1-3 years of high school	___	Graduated college	___
Graduated high school	___	Graduate or post-college professional school	___
Attended technical or professional school	___		

Thanks very much!

Please deposit questionnaire in box in lobby or hand to usher.

APPENDIX C

AUDIENCE SURVEY RESULTS

DISTANCE OF RESIDENCE FROM THEATER

	Responses	
Miles Away	Number	Percent
0-5	212	23.5
6-10	175	19.4
11-20	169	18.7
21-30	115	12.7
31-50	107	11.8
51-75	49	5.4
76-100	21	2.3
101+	56	6.2
Total	904	100.0

PLACE OF RESIDENCE

	Responses	
Place	Number	Percent
Boston	152	16.9
Newton	50	5.6
Brookline	42	4.7
Cambridge	42	4.7
Somerville	22	2.5
Worcester	18	2.0
Rest of Massachusetts	460	51.3
Out of State	101	11.3
Out of United States	10	1.1
Total	897	100.1
Unknown but not Boston	7	

TRIP DOWNTOWN WOULD HAVE BEEN MADE IF NOT ATTENDING PERFORMANCE

	Responses	
	Number	Percent
Yes	154	17.4
No	730	82.6
Total	884	100.0
Unknown	20	

Note: Percentages may not add to 100 due to rounding.

SEX OF RESPONDENT

Sex	Responses Number	Percent
Female	488	54.8
Male	403	45.2
Total	891	100.0
Unknown	13	

AGE OF RESPONDENT

Years of age	Responses Number	Percent
Under 20	42	4.7
20-24	95	10.7
25-34	344	38.9
35-44	167	18.8
45-54	132	14.9
55-64	81	9.1
65+	25	2.8
Total	886	99.8
Unknown	18	

MARITAL STATUS OF RESPONDENT

Status	Responses Number	Percent
Married	467	52.5
Single	423	47.5
Total	890	100.0
Unknown	14	

CHILDREN

Have children?	Responses Number	Percent
Yes	404	45.9
No	477	54.1
Total	880	100.0
Unknown	24	

OCCUPATION OF RESPONDENT AND RESPONDENT'S SPOUSE

	Respondent		Spouse	
	Number	Percent	Number	Percent
Professionals	392	46.0	175	39.6
Managers	121	14.2	63	14.3
Sales Workers	48	5.6	37	8.4
Clerical Workers	76	8.9	32	7.2
Crafts/Trades	20	2.3	10	2.3
Operatives	8	.9	5	1.1
Service Workers	13	1.5	9	2.0
Students	100	11.7	13	2.9
Housewife/husband	59	6.9	85	19.2
Retired	16	1.9	13	2.9
Total	853	99.9	442	100.0
Unknown	51		25	

INCOME OF RESPONDENT OR FAMILY OF RESPONDENT

	Responses	
	Number	Percent
Annual Income		
Less than $5,000	49	6.0
$5,000-9,999	79	9.7
$10,000-14,999	125	15.3
$15,000-19,999	128	15.7
$20,000-24,999	89	10.9
$25,000-29,999	72	8.8
$30,000-34,999	68	8.3
$35,000 +	206	25.2
Total	816	99.9
Unknown	88	

EDUCATIONAL ATTAINMENT OF RESPONDENT

	Responses	
	Number	Percent
Highest Grade		
Elementary School	10	1.1
1-3 Years High School	32	3.6
High School Graduate	87	9.9
Technical/Professional School Graduate	52	5.9
1-3 Years of College	127	14.5
College Graduate	258	29.4
Graduate School	312	35.5
Total	878	99.9
Unknown	26	

APPENDIX D

DESCRIPTION OF THEATRICAL PRODUCERS (EXCEPT MOTION PICTURES), BANDS, ORCHESTRAS, AND ENTERTAINERS INDUSTRY CLASS - 792

SIC

7922 Theatrical Producers (Except Motion Picture) and Miscellaneous Theatrical Services

Establishments primarily engaged in providing "live" theatrical presentations, such as road companies, stock companies, summer theater, and burlesque houses. This industry also includes services allied with theatrical presentations, such as casting agencies; booking agencies for plays, artists, and concerts; scenery, lighting, and other equipment services; and theatrical ticket agencies. Theaters which are normally rented to theatrical producers, stock companies, etc., are classified as real estate operations (Industry 6512). Motion picture theaters and motion picture service industries are classified in Major Group 78.

Ballet production
Booking agencies, theatrical: except motion picture
Burlesque companies
Concert management service
Costume design, theatrical
Employment agencies: theatrical, radio and television
Legitimate theater producers
Opera companies
Plays (road companies and stock companies)
Radio and television program producers
Rental of theatrical scenery
Repertory or stock companies, theatrical
Scenery design, theatrical
Stock companies, theatrical
Television program, including commercials, producers
Theatrical companies, amateur
Theatrical equipment rental
Theatrical lighting, on a contract basis
Theatrical production, except motion picture
Theatrical ticket agencies
Ticket agencies, theatrical
Vaudeville companies

7929 Bands, Orchestras, Actors, and Other Entertainers and Entertainment Groups

Establishments primarily engaged in providing entertainment services other than "live" theatrical presentations. These establishments include bands, orchestras, entertainers and producers of "live" entertainment for radio or television.

Actors
Classical music groups or artists
Concert artists
Concert organizations
Dance bands
Entertainers
Entertainment groups
Entertainment services: entertainers for restaurants, clubs, radio and TV
Jazz music groups or artists
Popular music groups or artists
Symphony orhestras
Magicians
Orchestras

Source: Executive Office of the President, Office of Management and Budget, Standard Industrial Classification Manual, 1978.

APPENDIX E

ATTENDANCE OF FILMS IN THE THEATRE DISTRICT, 1978

SACK THEATRES CORPORATION'S MOTION PICTURE THEATER ATTENDANCE AND CORPORATE EMPLOYMENT IN BOSTON

Theater	
Cinema 57 1&11	385,800
Gary Theatre (10 months 1978)	58,800
Music Hall	2,800
Savoy Theatre 1& 11 (10 months 1978)	186,300
Saxon Theatre	65,800
	699,500

Attendance at all Sack Theatres in Boston, 1978	1,901,000
Percentage of all Attendance in Theatre District theaters	36.8%

Employment with Sack Theatre Corporation in Boston: approximately 325 annual average

Source: Mr. William Moscarelli, Sack Theatres Corp., conversation, June 15, 1979.

APPENDIX F

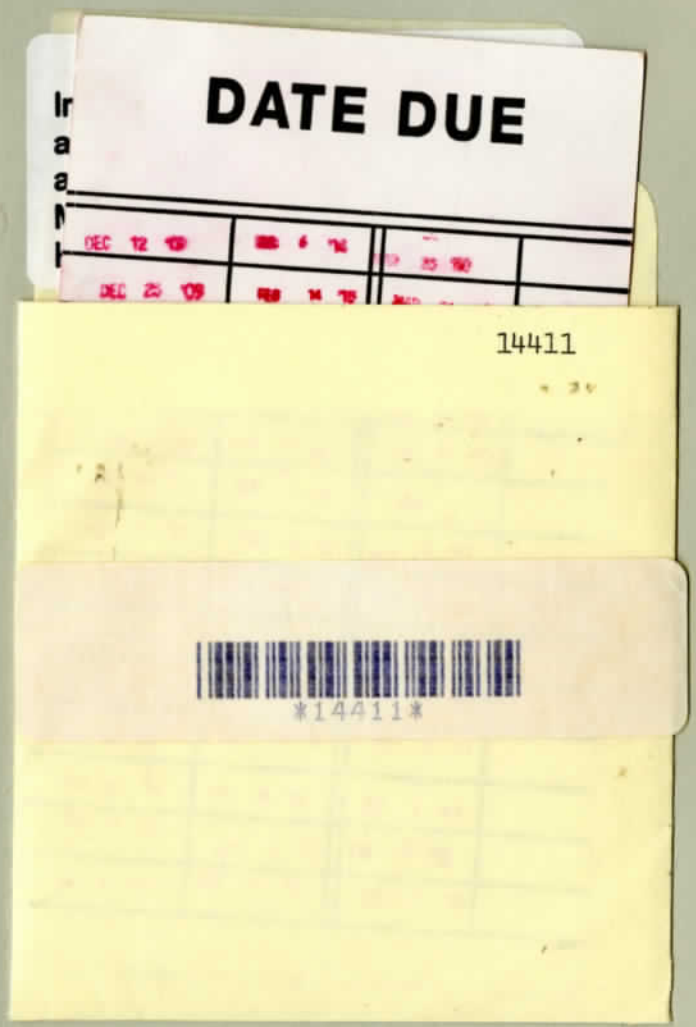
THEATER ACTIVITY AT THE COLONIAL, SHUBERT, AND WILBUR THEATRES
1975 - 1978

Calendar Year	Annual Number of Shows	Annual Number of Performances	Annual Number of Performing Weeks
1975	22	494	62
1976	22	629	79
1977	28	533	68
1978	22*	611	76

* Includes the show "Beatlemania."

Source: Playhouse owners and lessees; Variety, September to December, 1978

BOSTON ARCHITECTURAL CENTER
LIBRARY
320 NEWBURY ST.
BOSTON, MA. 02115



3299 C20